ELSEVIER

Nuclear Engineering and Design 151 (1994) 561–563

Nuclear Engineering and Design

Author Index of Volume 151

Bartholomé, G., M. Erve, R. Hertlein, E. Keim and A. Schöpper, Safety analysis of reactor pressure vessels considering irradiation effects and improved temperature calculations for PTS 151 (1994) 373
Blauel, J.-G., see Kordisch, H. 151 (1994) 321
Blind, D., see Diem, H. 151 (1994) 269
Blind, D., see Schuler, X. 151 (1994) 291
Bocquet, P., A. Cheviet and R. Dumont, Examples of the evolution of materials for nuclear applications: metallurgical improvement of 16MND5 steel and new technologies for manufacturing heavy components, 151 (1994) 503
Breitbach, G., A. Schmidt-Plutka, F. Schubert and H. Nickel, Investigations of creep ratcheting on thick-walled tubes 151 (1994) 337
Bricard, P., see Delhaye, J.M. 151 (1994) 65
Brocks, W., A. Eberle, S. Fricke and H. Veith, Large stable crack growth in fracture mechanics specimens 151 (1994) 387
Brosi, S., see Kussmaul, K. 151 (1994) 473

Catton, I., and M. Chung, Two-phase flow in porous media with phase change: post dryout heat transfer and steam injection 151 (1994) 185
Cheng, H.S., see Rohatgi, U.S. 151 (1994) 145
Cheviet, A., see Bocquet, P. 151 (1994) 503
Chung, M., see Catton, I. 151 (1994) 185

Darlaston, B.J, Phase 2 of the International Piping Integrity Research Group programme 151 (1994) 347
de Boer, A., see Stoppler, W. 151 (1994) 307
Deimel, P., see Schellenberger R. 151 (1994) 449
Delhaye, J.M., and P. Bricard, Interfacial area in bubbly flow: experimental data and correlations 151 (1994) 65
Derbidge, T.C., see Torok, R.C. 151 (1994) 173
Diem, H., D. Blind, E. Roos, O. Wachter and E. Tolksdorf, Failure behaviour of thick-walled, austenitic pipe bends under cyclic bending loading at constant internal pressure 151 (1994) 269
Diem, H., see Kussmaul, K. 151 (1994) 473
Drew, D.A., see Kalkach-Navarro, S. 151 (1994) 15
Dumont, R., see Bocquet, P. 151 (1994) 503
Eberle, A., see Brocks, W. 151 (1994) 387
Eisele, U., see Schuler, X. 151 (1994) 291
Eltwila, F., see Ishii, M. 151 (1994) 223
Erve, M., see Bartholomé, G. 151 (1994) 373

Fricke, S., see Brocks, W. 151 (1994) 387

Gladen, H., and H. Kaesche, Stress corrosion cracking of mild steel in high pressure, high temperature water during slow strain rate testing 151 (1994) 463

Healzer, J.M., see Torok, R.C. 151 (1994) 173
Henry, R.E., see Suh, K.Y. 151 (1994) 203
Herter, K.-H., see Schuler, X. 151 (1994) 291
Hertlein, R., see Bartholomé, G. 151 (1994) 373
Hippelein, K., see Stoppler, W. 151 (1994) 307
Hsu, Y.-Y., Some challenges to the thermal–hydraulic codes 151 (1994) 103
Huang W.D., see Kocamustafaogullari, G. 151 (1994) 79

Ishii, M., G. Zhang, H.C. No and F. Eltwila, Stepwise integral scaling method for severe accident analysis and its application to corium dispersion in direct containment heating 151 (1994) 223

Just, T., Flaw detection ability of NDT techniques on clad surfaces of reactor pressure vessels 151 (1994) 531

Kaesche, H., see Gladen, H. 151 (1994) 463
Kalkach-Navarro, S., R.T. Lahey, Jr. and D.A. Drew, Analysis of the bubbly/slug flow regime transition 151 (1994) 15
Keim, E., see Bartholomé, G. 151 (1994) 373
Keller, H.P., see Kluttig, B. 151 (1994) 523

Kiselev, V.A., E.Yu. Rivkin, Yu.I. Smirnov, L.M. Sokov and A.V. Sudakov, Application of leak-before-break concept to integrity and safety of PWR primary piping with WWER 1000 151 (1994) 409
Klenk, A., see Kussmaul, K. 151 (1994) 489
Kluttig, B., H. Steinmill, W. Stoppler and H.P. Keller, Crack growth measurements on components under cyclic loading: comparison of different methods 151 (1994) 523
Kobes, E., see Kussmaul, K. 151 (1994) 473
Kocamustafaogullari, G., and W.D. Huang, Internal structure and interfacial velocity development for bubbly two-phase flow 151 (1994) 79
Kordisch, H., G. Nagel, J.-G. Blauel, H. Stöckl and M. Sester, Application of material models and assessment of strains in a surgeline under cyclic thermal loading 151 (1994) 321
Kröning, M., see von Bernus, L. 151 (1994) 539
Kussmaul, K., E. Kobes, H. Diem, D. Schrammel and S. Brosi, Structural dynamics and fracture mechanics calculations of the behaviour of a DN 425 test piping system subjected to transient loading by water hammer 151 (1994) 473
Kussmaul, K., T. Link, A. Klenk and T. Nguyen-Huy, Determination of crack initiation and crack resistance using compact specimens, and comparison with results of numerical simulation of dynamically loaded wide plates 151 (1994) 489
Kymäläinen, O., see Theofanous, T.G. 151 (1994) 247

Lahey, Jr., R.T., see Kalkach-Navarro, S. 151 (1994) 15
Lahey, Jr., R.T., see Taleyarkhan, R.P. 151 (1994) 157
Lellouche, G.S., Concerning the location of void detachment in annuli 151 (1994) 259
Levy, S., Heat transfer during molten corium–concrete interactions 151 (1994) 235
Link, T., see Kussmaul, K. 151 (1994) 489
Lowe, Jr., A.L., and K.K. Yoon, Role of irradiated materials data in performing reactor vessel fracture toughness analysis 151 (1994) 401

Mallen, A.N., see Rohatgi, U.S. 151 (1994) 145
McFarlane, A.F., see Taleyarkhan, R.P. 151 (1994) 157
Mohr, F., see von Bernus, L. 151 (1994) 539

Nagel, G., see Kordisch, H. 151 (1994) 321
Nguyen-Huy, T., see Kussmaul, K. 151 (1994) 489
Nickel, H., see Breitbach, G. 151 (1994) 337
Nigmatulin, R.I., and K.I. Soplenkov, Nonstationary outflow and rarefaction waves in flashing liquid 151 (1994) 131
No, H.C., see Ishii, M. 151 (1994) 223

Podowski, M.Z., see Taleyarkhan, R.P. 151 (1994) 157

Rathgeb, W., and R. Schmid, Ultrasonic inspections of fuel alignment pins 151 (1994) 551
Rathgeb, W., see von Bernus, L. 151 (1994) 539
Reyes, Jr., J.N., Scaling single-state variable catastrophe functions: an application to two-phase natural circulation 151 (1994) 41
Rivkin, E.Yu., see Kiselev, V.A. 151 (1994) 409
Rohatgi, U.S., A.N. Mallen, H.S. Cheng and W. Wulff, Validation of the Engineering Plant Analyzer methodology with Peach Bottom 2 stability tests 151 (1994) 145
Roos, E., see Diem, H. 151 (1994) 269

Salmassi, T., see Theofanous, T.G. 151 (1994) 247
Sato, I., see Susuki, K. 151 (1994) 513
Schellenberger R., and P. Deimel, J_R curves of the low alloy steel 20 MnMoNi 5 5 with two different sulphur contents in oxygen-containing high temperature water at 240 °C 151 (1994) 449
Schmid, R., see Rathgeb, W. 151 (1994) 551
Schmid, R., see von Bernus, L. 151 (1994) 539
Schmidt-Plutka, A., see Breitbach, G. 151 (1994) 337
Schöpper, A., see Bartholomé, G. 151 (1994) 373
Schrammel, D., see Kussmaul, K. 151 (1994) 473
Schubert, F., see Breitbach, G. 151 (1994) 337
Schuler, X., D. Blind, U. Eisele, K.-H. Herter and W. Stoppler, Fracture mechanics evaluation of cracked components with consideration of multiaxiality of stress state 151 (1994) 291
Scott, P., G. Wilkowski, D. Sturm and W. Stoppler, Development of a database of pipe fracture experiments 151 (1994) 359
Scott, P., see Stoppler, W. 151 (1994) 425
Sester, M., see Kordisch, H. 151 (1994) 321
Smirnov, Yu.I., see Kiselev, V.A. 151 (1994) 409
Sokov, L.M., see Kiselev, V.A. 151 (1994) 409
Soplenkov, K.I., see Nigmatulin, R.I. 151 (1994) 131
Steinmill, H., see Kluttig, B. 151 (1994) 523
Stoppler, W., D. Sturm, K. Hippelein and A. de Boer, Crack growth and fracture behaviour of pipes with circumferential defects under internal pressure and superimposed alternating bending load 151 (1994) 307
Stoppler, W., D. Sturm, P. Scott and G. Wilkowski, Analysis of the failure behaviour of longitudinally flawed pipes and vessels 151 (1994) 425
Stoppler, W., see Kluttig, B. 151 (1994) 523
Stoppler, W., see Schuler, X. 151 (1994) 291
Stoppler, W., see Scott, P. 151 (1994) 359
Stöckl, H., see Kordisch, H. 151 (1994) 321
Sturm, D., see Scott, P. 151 (1994) 359
Sturm, D., see Stoppler, W. 151 (1994) 307
Sturm, D., see Stoppler, W. 151 (1994) 425
Sudakov, A.V., see Kiselev, V.A. 151 (1994) 409
Suh, K.Y., and R.E. Henry, Integral analysis of debris material and heat transport in reactor vessel lower plenum 151 (1994) 203

Susuki, K., I. Sato and H. Tsukada, Manufacturing and material properties of ultra-large size forgings for advanced BWRPV 151 (1994) 513
Syri, S., see Theofanous, T.G. 151 (1994) 247

Taleyarkhan, R.P., A.F. McFarlane, R.T. Lahey, Jr. and M.Z. Podowski, Benchmarking and qualification of the NUFREQ-NPW code for best estimate prediction of multichannel core stability margins 151 (1994) 157
Theofanous, T.G., S. Syri, T. Salmassi, O. Kymäläinen and H. Tuomisto, Critical heat flux through curved, downward facing, thick walls 151 (1994) 247
Tolksdorf, E., see Diem, H. 151 (1994) 269
Torok, R.C., T.C. Derbidge and J.M. Healzer, Water level measurement uncertainty during BWR instability 151 (1994) 173
Tsukada, H., see Susuki, K. 151 (1994) 513
Tuomisto. H., see Theofanous, T.G. 151 (1994) 247

Veith, H., see Brocks, W. 151 (1994) 387
von Bernus, L., W. Rathgeb, R. Schmid, F. Mohr and M. Kröning, Current in-service inspections of austenitic stainless steel and dissimilar metal welds in light water nuclear power plants 151 (1994) 539

Wachter, O., see Diem, H. 151 (1994) 269
Wallis, G.B., The particle pressure of arrays in a potential flow 151 (1994) 1
Wilkowski, G., see Scott, P. 151 (1994) 359
Wilkowski, G., see Stoppler, W. 151 (1994) 425
Wulff, W., Integral methods for simulating transient conduction in nuclear reactor components 151 (1994) 113
Wulff, W., see Rohatgi, U.S. 151 (1994) 145

Yadigaroglu, G., and M. Zeller, Fluid-to-fluid scaling for a gravity- and flashing-driven natural circulation loop 151 (1994) 49
Yoon, K.K., see Lowe, Jr., A.L. 151 (1994) 401

Zeller, M., see Yadigaroglu, G. 151 (1994) 49
Zhang, G., see Ishii, M. 151 (1994) 223

ELSEVIER

Nuclear Engineering and Design 151 (1994) 565–567

Fusion Engineering and Design

Subject Index of Volume 151

Thermal and fluid design

Analysis of the bubbly/slug flow regime transition, S. Kalkach-Navarro, R.T. Lahey, Jr. and D.A. Drew 151 (1994) 15
Fluid-to-fluid scaling for a gravity- and flashing-driven natural circulation loop, G. Yadigaroglu and M. Zeller 151 (1994) 49
Interfacial area in bubbly flow: experimental data and correlations, J.M. Delhaye and P. Bricard 151 (1994) 65
Internal structure and interfacial velocity development for bubbly two-phase flow, G. Kocamustafaogullari and W.D. Huang 151 (1994) 79
Some challenges to the thermal–hydraulic codes, Y.-Y. Hsu 151 (1994) 103
Integral methods for simulating transient conduction in nuclear reactor components, W. Wulff 151 (1994) 113
Non-stationary outflow and rarefaction waves in flashing liquid, R.I. Nigmatulin and K.I. Soplenkov 151 (1994) 131
Validation of the Engineering Plant Analyzer methodology with Peach Bottom 2 stability tests, U.S. Rohatgi, A.N. Mallen, H.S. Cheng and W. Wulff 151 (1994) 145
Benchmarking and qualification of the NUFREQ–NPW code for best estimate prediction of multichannel core stability margins, R.P. Taleyarkhan, A.F. McFarlane, R.T. Lahey, Jr. and M.Z. Podowski 151 (1994) 157
Water level measurement uncertainty during BWR instability, R.C. Torok, T.C. Derbidge and J.M. Healzer 151 (1994) 173
Two-phase flow in porous media with phase change: post dryout heat transfer and steam injection, I. Catton and M. Chung 151 (1994) 185
Integral analysis of debris material and heat transport in reactor vessel lower plenum, K.Y. Suh and R.E. Henry 151 (1994) 203
Stepwise integral scaling method for severe accident analysis and its application to corium dispersion in direct containment heating, M. Ishii, G. Zhang, H.C. No and F. Eltwila 151 (1994) 223
Heat transfer during molten corium–concrete interactions, S. Levy 151 (1994) 235

Heat transfer

Integral analysis of debris material and heat transport in reactor vessel lower plenum, K.Y. Suh and R.E. Henry 151 (1994) 203
Heat transfer during molten corium–concrete interactions, S. Levy 151 (1994) 235
Critical heat flux through curved, downward facing, thick walls, T.G. Theofanous, S. Syri, T. Salmassi, O. Kymäläinen and H. Tuomisto 151 (1994) 247

Engineering mechanics

Failure behaviour of thick-walled, austenitic pipe bends under cyclic bending loading at constant internal pressure, H. Diem, D. Blind, E. Roos, O. Wachter and E. Tolksdorf 151 (1994) 269
Fracture mechanics evaluation of cracked components with consideration of multiaxiality of stress state, X. Schuler, D. Blind, U. Eisele, K.-H. Herter and W. Stoppler 151 (1994) 291
Crack growth and fracture behaviour of pipes with circumferential defects under internal pressure and superimposed alternating bending load, W. Stoppler, D. Sturm, K. Hippelein and A. de Boer 151 (1994) 307
Application of material models and assessment of strains in a surgeline under cyclic thermal loading, H. Kordisch, G. Nagel, J.-G. Blauel, H. Stöckl and M. Sester 151 (1994) 321
Investigations of creep ratcheting on thick-walled tubes, G. Breitbach, A. Schmidt-Plutka, F. Schubert and H. Nickel 151 (1994) 337
Phase 2 of the International Piping Integrity Research Group programme, B.J. Darlaston 151 (1994) 347

Development of a database of pipe fracture experiments, P. Scott, G. Wilkowski, D. Sturm and W. Stoppler 151 (1994) 359
Large stable crack growth in fracture mechanics specimens, W. Brocks, A. Eberle, S. Fricke and H. Veith 151 (1994) 387
Application of leak-before-break concept to integrity and safety of PWR primary piping with WWER 1000, V.A. Kiselev, E.Yu. Rivkin, Yu.I. Smirnov, L.M. Sokov and A.V. Sudakov 151 (1994) 409
J_R curves of the low alloy steel 20 MnMoNi 5 5 with two different sulphur contents in oxygen-containing high temperature water at 240 °C, R. Schellenberger and P. Deimel 151 (1994) 449
Stress corrosion cracking of mild steel in high pressure, high temperature water during slow strain rate testing, H. Gladen and H. Kaesche 151 (1994) 463
Structural dynamics and fracture mechanics calculations of the behaviour of a DN 425 test piping system subjected to transient loading by water hammer, K. Kussmaul, E. Kobes, H. Diem, D. Schrammel and S. Brosi 151 (1994) 473
Determination of crack initiation and crack resistance using compact specimens, and comparison with results of numerical simulation of dynamically loaded wide plates, K. Kussmaul, T. Link, A. Klenk and T. Nguyen-Huy 151 (1994) 489
Crack growth measurements on components under cyclic loading: comparison of different methods, B. Kluttig, H. Steinmill, W. Stoppler and H.P. Keller 151 (1994) 523
Flaw detection ability of NDT techniques on clad surfaces of reactor pressure vessels, T. Just 151 (1994) 531
Current in-service inspections of austenitic stainless steel and dissimilar metal welds in light water nuclear power plants, L. von Bernus, W. Rathgeb, R. Schmid, F. Mohr and M. Kröning 151 (1994) 539

Materials properties

Failure behaviour of thick-walled, austenitic pipe bends under cyclic bending loading at constant internal pressure, H. Diem, D. Blind, E. Roos, O. Wachter and E. Tolksdorf 151 (1994) 269
Fracture mechanics evaluation of cracked components with consideration of multiaxiality of stress state, X. Schuler, D. Blind, U. Eisele, K.-H. Herter and W. Stoppler 151 (1994) 291
Crack growth and fracture behaviour of pipes with circumferential defects under internal pressure and superimposed alternating bending load, W. Stoppler, D. Sturm, K. Hippelein and A. de Boer 151 (1994) 307
Application of material models and assessment of strains in a surgeline under cyclic thermal loading, H. Kordisch, G. Nagel, J.-G. Blauel, H. Stöckl and M. Sester 151 (1994) 321
Investigations of creep ratcheting on thick-walled tubes, G. Breitbach, A. Schmidt-Plutka, F. Schubert and H. Nickel 151 (1994) 337
Phase 2 of the International Piping Integrity Research Group programme, B.J. Darlaston 151 (1994) 347
Large stable crack growth in fracture mechanics specimens, W. Brocks, A. Eberle, S. Fricke and H. Veith 151 (1994) 387
Role of irradiated materials data in performing reactor vessel fracture toughness analysis, A.L. Lowe, Jr. and K.K. Yoon 151 (1994) 401
Analysis of the failure behaviour of longitudinally flawed pipes and vessels, W. Stoppler, D. Sturm, P. Scott and G. Wilkowski 151 (1994) 425
J_R curves of the low alloy steel 20 MnMoNi 5 5 with two different sulphur contents in oxygen-containing high temperature water at 240 °C, R. Schellenberger and P. Deimel 151 (1994) 449
Stress corrosion cracking of mild steel in high pressure, high temperature water during slow strain rate testing, H. Gladen and H. Kaesche 151 (1994) 463
Examples of the evolution of materials for nuclear applications: metallurgical improvement of 16MND5 steel and new technologies for manufacturing heavy components, P. Bocquet, A. Cheviet and R. Dumont 151 (1994) 503
Manufacturing and material properties of ultralarge size forgings for advanced BWRPV, K. Susuki, I. Sato and H. Tsukada 151 (1994) 513

Mechanical design, component fabrication and testing

Application of material models and assessment of strains in a surgeline under cyclic thermal loading, H. Kordisch, G. Nagel, J.-G. Blauel, H. Stöckl and M. Sester 151 (1994) 321
Investigations of creep ratcheting on thick-walled tubes, G. Breitbach, A. Schmidt-Plutka, F. Schubert and H. Nickel 151 (1994) 337
Phase 2 of the International Piping Integrity Research Group programme, B.J. Darlaston 151 (1994) 347

Examples of the evolution of materials for nuclear applications: metallurgical improvement of 16MND5 steel and new technologies for manufacturing heavy components, P. Bocquet, A. Cheviet and R. Dumont 151 (1994) 503

Reactor concepts and systems analysis

Validation of the Engineering Plant Analyzer methodology with Peach Bottom 2 stability tests, U.S. Rohatgi, A.N. Mallen, H.S. Cheng and W. Wulff 151 (1994) 145
Role of irradiated materials data in performing reactor vessel fracture toughness analysis, A.L. Lowe, Jr. and K.K. Yoon 151 (1994) 401

Structural design, construction methods and testing

The particle pressure of arrays in a potential flow, G.B. Wallis 151 (1994) 1
Scaling single-state variable catastrophe functions: an application to two-phase natural circulation, J.N. Reyes, Jr. 151 (1994) 41
Validation of the Engineering Plant Analyzer methodology with Peach Bottom 2 stability tests, U.S. Rohatgi, A.N. Mallen, H.S. Cheng and W. Wulff 151 (1994) 145
Critical heat flux through curved, downward facing, thick walls, T.G. Theofanous, S. Syri, T. Salmassi, O. Kymäläinen and H. Tuomisto 151 (1994) 247
Concerning the location of void detachment in annuli, G.S. Lellouche 151 (1994) 259
Stress corrosion cracking of mild steel in high pressure, high temperature water during slow strain rate testing, H. Gladen and H. Kaesche 151 (1994) 463
Structural dynamics and fracture mechanics calculations of the behaviour of a DN 425 test piping system subjected to transient loading by water hammer, K. Kussmaul, E. Kobes, H. Diem, D. Schrammel and S. Brosi 151 (1994) 473

Core physics and fuel design

Benchmarking and qualification of the NUFREQ-NPW code for best estimate prediction of multichannel core stability margins, R.P. Taleyarkhan, A.F. McFarlane, R.T. Lahey, Jr. and M.Z. Podowski 151 (1994) 157
Stepwise integral scaling method for severe accident analysis and its application to corium dispersion in direct containment heating, M. Ishii, G. Zhang, H.C. No and F. Eltwila 151 (1994) 223

Nuclear safety

Safety analysis of reactor pressure vessels considering irradiation effects and improved temperature calculations for PTS, G. Bartholomé, M. Erve, R. Hertlein, E. Keim and A. Schöpper 151 (1994) 373
Application of leak-before-break concept to integrity and safety of PWR primary piping with WWER 1000, V.A. Kiselev, E.Yu. Rivkin, Yu.I. Smirnov, L.M. Sokov and A.V. Sudakov 151 (1994) 409
Flaw detection ability of NDT techniques on clad surfaces of reactor pressure vessels, T. Just 151 (1994) 531
Current in-service inspections of austenitic stainless steel and dissimilar metal welds in light water nuclear power plants, L. von Bernus, W. Rathgeb, R. Schmid, F. Mohr and M. Kröning 151 (1994) 539
Ultrasonic inspections of fuel alignment pins, W. Rathgeb and R. Schmid 151 (1994) 551